

## Listing of the Claims

1 – 10. (Canceled)

11. (Previously Presented): A system for debugging in more than one programming language, comprising:

a multi-language debugger with the capability to debug a source code file which contains multiple nested languages, wherein the multi-language debugger interprets multiple languages that are nested in a single source file, and wherein the multiple nested languages can include both compiled and interpreted languages;

a script debug controller, wherein the multi-language debugger uses a standardized interface for a script engine, wherein all communications with the script engine will be through calls to the script debug controller;

a debuggable frame object, wherein the script engine uses a debuggable frame object to retrieve script context for a supported language, wherein each of the multiple nested languages is displayed in a debuggable frame object, and wherein each of the multiple nested languages can be edited in the debuggable frame object;

an interface to a messaging environment, wherein the interface is implemented by a runtime messaging environment that controls a running state of the script engine; and

a debug commands interface.

12. (Previously Presented): The system of claim 11, wherein the multi-language debugger is extensible and a user can add language definitions to support additional languages.
13. (Previously Presented): The system of claim 11, wherein the debugger uses a Debugging Interface.
14. (Previously Presented): The system of claim 11, wherein if more than one language appears on a stack, a user can see a debuggable frame for each language and the user can inspect variables for each language.
15. (Previously Presented): The system of claim 11, further comprising: a proxy, wherein the proxy is used between the executing code being debugged and the debugger.
16. (Previously Presented): The system of claim 15, wherein the script engine interface can be used by the debugger to communicate metadata to the proxy.
17. (Previously Presented): The system of claim 11, wherein the debugger interacts with the runtime messaging environment.
18. (Previously Presented): The system of claim 17, wherein debugging is performed on a server side of the runtime messaging environment.

19. (Previously Presented): The system of claim 18, wherein the runtime messaging environment interprets language interactions and performs debugging using a Platform Debugging Architecture.

20. (Previously Presented): The system of claim 11, wherein the script engine has a static constructor load the script debug controller.

21. (Previously Presented): The system of claim 20, wherein the script debug controller receives information from the script engine, comprising:

- a) language extensions for each language;
- b) classes that implement the script engine;
- c) information on optional capabilities for each language; and
- d) language name.